## **Program: M.Tech. in Industrial Metallurgy (Online Program)**

Semester	Course Code	Course Name	Course Credits
1 to 8 semesters	MSxxx9	Electives (Theory Courses)	24
3 to 8 semesters	MS5195	Thesis: Stage I	12
4 to 8 semesters	MS5295	Thesis: Stage II	12
		Basket of Elective Courses	
	MS5059	Advanced physical metallurgy	3
	MS5509	Deformation behaviour of materials	3
	MS5519	Applied phase equilibria and phase transformations	3
	MS5529	Engineering alloys	2
	MS5539	Corrosion science and engineering	3
	MS5549	Diffusion analysis in materials engineering	3
	MS5609	Role of microstructure in materials selection and design	3
	MS5559	Welding processes	3
	MS5479	Metallurgy of welding and additive manufacturing	3
	MS5049	Thermomechanical processing of materials	3
	MS5569	Casting and solidification	3
	MS5139	Powder metallurgy manufacturing	3
	MS5469	Metal additive manufacturing	3
	MS5579	Structure and characterization of materials	3
	MS5029	Electron microscopy	3
	MS5289	Wear and tribology of materials	1
	MS5589	Non-destructive testing of materials	2
	MS5599	Metallurgical failure analysis	2
	MS5109	Composite materials	3
	MS5459	High entropy materials	1
	MS5309	Microstructural design for advanced manufacturing	3
	MS5149	Introduction to computational methods in materials science	3